Mr. John Bawcum
The Braun Corporation
PO Box 310
Winamac, IN 46996

Re: **131-11788**
Significant Source Modification to:
Part 70 permit No.: **T 131-7058-00017**

Dear Mr. Bawcum:

The Braun Corporation was issued Part 70 operating permit **T 131-7058-00017** on April 20, 1999 for a stationary motor vehicle conversion plant. An application to modify the source was received on January 21, 2000. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

Thirteen (13) surface coating facilities and assembly areas in Plant 4, described as follows:

(1) EnterVan Line No. 1 assembly area, identified as Enter/Assem. No. 1, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(2) EnterVan Line No. 1 refinishing surface coating booth, identified as Enter/Ref. No. 1, with a maximum rating of 15.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Enter 1. This facility operates independently of all other refinishing surface coating facilities.

(3) EnterVan Line No. 1 undercoating area, identified as Enter/Un. No. 1, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(4) EnterVan Line No. 2 assembly area, identified as Enter/Assem. No. 2 with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(5) EnterVan Line No. 2 refinishing surface coating booth, identified as Enter/Ref. No. 2, with a maximum rating of 15.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Enter 2. This facility operates independently of all other refinishing surface coating facilities.

(6) EnterVan Line No. 2 undercoating area, identified as Enter/Un. No. 2, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(7) Bus/ParaTransit Van Line No. 1 assembly area, identified as Para/Assem. No. 1, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(8) Bus/ParaTransit Van Line No.1 refinishing surface coating booth, identified as Para/Ref. 1, with a maximum rating of 12.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 1. This facility operates independently of all other refinishing surface coating facilities.

(9) Bus/ParaTransit Van Line No.1 undercoating area, identified as Para/Un. No. 1, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(10) Bus/ParaTransit Van Line No. 2 assembly area, identified as Para/Assem. No. 2, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(11) Bus/ParaTransit Van Line No. 2 refinishing surface coating booth, identified as Para/Ref. 2, with a maximum rating of12.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 2. This facility operates independently of all other refinishing surface coating facilities.

(12) Bus/ParaTransit Van Line No. 2 undercoating area, identified as Para/Un. No. 2, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(13) Flare Paint Shop equipped with one (1) surface coating booth, identified as FP No. 1, with a maximum rating of 54.0 flare sets per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID FP 1. This facility operates independently of all other surface coating facilities.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The proposed operating conditions applicable to these emission units are attached to this Source Modification approval. These proposed operating conditions shall be incorporated into the Part 70 operating permit as an administrative amendment in accordance with 326 IAC 2-7-10.5(l)(1) and 326 IAC 2-7-11.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter contact Patrick T. Brennan, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
PTB/MES
cc: File - Pulaski County
U.S. EPA, Region V
Pulaski County Health Department
Air Compliance Section Inspector - Eric Courtright
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT
# OFFICE OF AIR MANAGEMENT

## The Braun Corporation
## 623 West 11th Street
## Winamac, Indiana 46996

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) 40 CFR Part 70.6, IC 13-15 and IC 13-17.

| Operation Permit No.: **T131-7058-00017** | |
|---|---|
| Issued by:<br>Janet G. McCabe, Assistant Commissioner<br>Office of Air Management | Issuance Date: April 20, 1999 |

| First Significant Permit Modification 131-10831 | Pages Affected: 5, 6, 28, 28a, 29, 29a, 30 |
|---|---|
| Issued by:<br>Paul Dubenetzky, Branch Chief<br>Office of Air Management | Issuance Date: August 2, 1999 |

| First Administrative Amendment 131-11117 | Pages Affected: 5, 6, 28, 28a, 29, 29a, 30 |
|---|---|
| Issued by:<br>Paul Dubenetzky, Branch Chief<br>Office of Air Management | Issuance Date: September 14, 1999 |

| Second Significant Source Modification 131-11788 | Pages Affected: 5, 6, 6a, 28, 28a, 29, 29a, 30, 33, 33a |
|---|---|
| Issued by:<br>Paul Dubenetzky, Branch Chief<br>Office of Air Management | Issuance Date: |

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**QUARTERLY COMPLIANCE MONITORING REPORT FORM**

# A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary motor vehicle conversion plant.

| | |
|---|---|
| Responsible Official: | William R. Roth |
| Source Address: | 623 West 11th Street, Winamac, IN 46996 |
| Mailing Address: | P. O. Box 310, Winamac, IN 46996 |
| Phone Number: | 219-946-6153 |
| SIC Code: | 3711 |
| County Location: | Pulaski |
| County Status: | Attainment for all criteria pollutants |
| Source Status: | Minor Source, under PSD Rules<br>Major Source, Part 70 Permit Program |

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Thirteen (13) surface coating facilities and assembly areas in Plant 4, described as follows:

(1) EnterVan Line No. 1 assembly area, identified as Enter/Assem. No. 1, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(2) EnterVan Line No. 1 refinishing surface coating booth, identified as Enter/Ref. No. 1, with a maximum rating of 15.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Enter 1. This facility operates independently of all other refinishing surface coating facilities.

(3) EnterVan Line No. 1 undercoating area, identified as Enter/Un. No. 1, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(4) EnterVan Line No. 2 assembly area, identified as Enter/Assem. No. 2 with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(5) EnterVan Line No. 2 refinishing surface coating booth, identified as Enter/Ref. No. 2, with a maximum rating of 15.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Enter 2. This facility operates independently of all other refinishing surface coating facilities.

(6) EnterVan Line No. 2 undercoating area, identified as Enter/Un. No. 2, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(7) Bus/ParaTransit Van Line No. 1 assembly area, identified as Para/Assem. No. 1, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(8) Bus/ParaTransit Van Line No.1 refinishing surface coating booth, identified as Para/Ref. 1, with a maximum rating of 12.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 1. This facility operates independently of all other refinishing surface coating facilities.

(9) Bus/ParaTransit Van Line No.1 undercoating area, identified as Para/Un. No. 1, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(10) Bus/ParaTransit Van Line No. 2 assembly area, identified as Para/Assem. No. 2, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(11) Bus/ParaTransit Van Line No. 2 refinishing surface coating booth, identified as Para/Ref. 2, with a maximum rating of12.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 2. This facility operates independently of all other refinishing surface coating facilities.

(12) Bus/ParaTransit Van Line No. 2 undercoating area, identified as Para/Un. No. 2, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(13) Flare Paint Shop equipped with one (1) surface coating booth, identified as FP No. 1, with a maximum rating of 54.0 flare sets per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID FP 1. This facility operates independently of all other surface coating facilities.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes insignificant activities, as defined in 326 IAC 2-7-1(21).

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(b) EnterVan Line No. 1 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(c) EnterVan Line No. 2 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(d) Bus/ParaTransit Van Line No. 1 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(e) Bus/ParaTransit Van Line No. 2 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(f) Axle/Door welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(g) Welding operations at Plant 3, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(h) Touch-Up Booth/Oven No. 1 at Plant 4 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

(i) Touch-Up Booth/Oven No. 2 at Plant 4 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

(j) APD Door Shop at Plant 3 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

(k) Powder Coating and Oven at Plant 3 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

(l) Powder Coating Oven at Plant 3 with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.

(m) One (1) Burn Off Oven at Plant 3 equipped with two burners, with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.

(n) Space heaters with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22).

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## D.1 FACILITY OPERATION CONDITIONS - Surface Coating Areas

Facility Description [326 IAC 2-7-5(15)]

Thirteen (13) surface coating facilities and assembly areas in Plant 4, described as follows:

(1) EnterVan Line No. 1 assembly area, identified as Enter/Assem. No. 1, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(2) EnterVan Line No. 1 refinishing surface coating booth, identified as Enter/Ref. No. 1, with a maximum rating of 15.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Enter 1. This facility operates independently of all other refinishing surface coating facilities.

(3) EnterVan Line No. 1 undercoating area, identified as Enter/Un. No. 1, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(4) EnterVan Line No. 2 assembly area, identified as Enter/Assem. No. 2 with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(5) EnterVan Line No. 2 refinishing surface coating booth, identified as Enter/Ref. No. 2, with a maximum rating of 15.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Enter 2. This facility operates independently of all other refinishing surface coating facilities.

(6) EnterVan Line No. 2 undercoating area, identified as Enter/Un. No. 2, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(7) Bus/ParaTransit Van Line No. 1 assembly area, identified as Para/Assem. No. 1, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(8) Bus/ParaTransit Van Line No.1 refinishing surface coating booth, identified as Para/Ref. 1, with a maximum rating of 12.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 1. This facility operates independently of all other refinishing surface coating facilities.

(9) Bus/ParaTransit Van Line No.1 undercoating area, identified as Para/Un. No. 1, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(10) Bus/ParaTransit Van Line No. 2 assembly area, identified as Para/Assem. No. 2, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(11) Bus/ParaTransit Van Line No. 2 refinishing surface coating booth, identified as Para/Ref. 2, with a maximum rating of 12.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 2. This facility operates independently of all other refinishing surface coating facilities.

(12) Bus/ParaTransit Van Line No. 2 undercoating area, identified as Para/Un. No. 2, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.

(13) Flare Paint Shop equipped with one (1) surface coating booth, identified as FP No. 1, with a maximum rating of 54.0 flare sets per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID FP 1. This facility operates independently of all other surface coating facilities.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM emissions from the Enter/Assem. No. 1, Enter/Ref. No. 1, Enter/Un. No. 1, Enter/Assem. No. 2, Enter/Ref. No. 2, Enter/Un. No. 2, Para/Assem. No. 1, Para/Ref. No. 1, Para/Un. No. 1 Para/Assem. No. 2, Para/Ref. No. 2, Para/Un. No. 2 and FP No. 1 surface coating areas shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8]

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal substrates in the EnterVan and Bus/ParaTransit assembly and undercoating areas (Enter/Assem. No. 1, Enter/Un. No. 1, Enter/Assem. No. 2, Enter/Un. No. 2, Para/Assem. No. 1, Para/Un. No. 1, Para/Assem. No. 2 and Para/Un. No. 2) shall be limited to 3.5 pounds of VOCs per gallon of coating less water for extreme performance coatings, as delivered to the applicator.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

(b) Contact adhesives in the Bus/ParaTransit Van assembly areas (Para/Assem. No. 1 and Para/Assem. No. 2) are applied to wood substrates and could be subject to 326 IAC 8-1-6, but are exempt because potential VOC emissions from each production facility are below 25.0 TPY. Any change or modification to any production facility that may cause potential emissions of VOC to increase to 25 tons per year, shall require prior approval by OAM and use of Best Available Control Technology.

(c) The refinishing surface coating booths (Enter/Ref. No. 1, Enter/Ref. No. 2, Para/Ref. No. 1 and Para/Ref. No. 2) are exempt from the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) by 326 IAC 8-2-9(b)(3), because they are auto refinishing operations. These operations could be subject to 326 IAC 8-1-6 (BACT), but are exempt because each production facility has potential VOC emissions less than 25 tons per year. Any change or modification to any production facility that may cause potential emissions of VOC to increase to 25 tons per year, shall require prior approval by OAM and use of Best Available Control Technology.

(d) For the purposes of enforcing Conditions D.1.2(b) and D.1.2(c), a production facility is defined as one EnterVan or Bus/ParaTransit Van production line, consisting of one (1) assembly area, one (1) refinishing surface coating area and one (1) undercoating area. Each production line at the source operates independently of all other lines and is treated as a separate facility.

(e) The application of adhesives to wood substrates in the EnterVan and Bus/ParaTransit Van assembly areas (Enter/Assem. No. 1, Enter/Assem. No. 2, Para/Assem. No. 1 and Para/Assem. No. 2) is exempt from 326 IAC 8-2-12 because these coatings are applied to rough structural plywood on the bus and van floors, which are not considered furniture.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

**Compliance Determination Requirements**

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limits specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.5 Particulate Matter (PM)

The dry filters for PM control shall be in place at all times when the Enter/Ref. No. 1, Enter/Ref. No. 2, Para/Ref. No. 1, Para/Ref. No. 2 and FP1 surface coating booths are in operation.

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

D.1.6 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (Enter 1, Enter 2, Para 1, Para 2 and FP1) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Compliance Response Plan.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

D.1.7 Record Keeping Requirements

(a) To document compliance with Condition D.1.2(a), the Permittee shall maintain a record of the VOC content of the undercoating material and adhesives that are applied to metal substrates in the assembly areas. Records shall include either the Material Safety Data Sheets or VOC Data Sheets that verify the VOC content of the coatings used as applied.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Compliance Response Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**SECTION D.3 FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activities:

(b) EnterVan Line No. 1 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(c) EnterVan Line No. 2 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(d) Bus/ParaTransit Van Line No. 1 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(e) Bus/ParaTransit Van Line No. 2 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(f) Axle/Door welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(g) Welding operations at Plant 3, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(h) Touch-Up Booth/Oven No. 1 at Plant 4 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

(i) Touch-Up Booth/Oven No. 2 at Plant 4 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

(j) APD Door Shop at Plant 3 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

(k) Powder Coating and Oven at Plant 3 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

(l) Powder Coating Oven at Plant 3 with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.

(m) One (1) Burn Off Oven at Plant 3 equipped with two burners, with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.

(n) Space heaters with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

D.3.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the welding and surface coating operations shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.3.2 Incinerators [326 IAC 4-2-2]

Pursuant to 326 IAC 4-2-2, the burn off oven at Plant 3 shall:

(a) Consist of primary and secondary chambers or the equivalent;

(b) Be equipped with a primary burner unless burning wood products;

(c) Comply with 326 IAC 5-1 and 326 IAC 2;

(d) Be maintained properly as specified by the manufacturer and approved by the commissioner;

(e) Be operated according to the manufacturer's specifications and only burn waste approved by the commissioner;

(f) Comply with other state and/or local rules regarding installation and operation of incinerators;

(g) Be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;

(h) Not emit particulate matter in excess of five tenths (0.5) pounds of particulate matter per one thousand (1000) pounds of dry air exhaust at standard conditions corrected to fifty percent (50%) excess air; and

(i) Not create a nuisance or fire hazard.

**Compliance Determination Requirement**

D.3.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

D.3.4 Record Keeping and Reporting Requirements

There are no record keeping or reporting requirements for these facilities.

# Indiana Department of Environmental Management
# Office of Air Management

## Addendum to the Technical Support Document for a Significant Source Modification to a Part 70 Operating Permit

| | |
|---|---|
| **Source Name:** | **The Braun Corporation** |
| **Source Location:** | **623 West 11th Street, Winamac, Indiana 46996** |
| **County:** | **Pulaski** |
| **Operation Permit No.:** | **T 131-7058-00017** |
| **Significant Source Modification No.:** | **131-11788-00017** |
| **SIC Code:** | **3711** |
| **Permit Reviewer:** | **Patrick T. Brennan/MES** |

On April 12, 2000, the Office of Air Management (OAM) had a notice published in the Pulaski County Journal, Winamac, Indiana, stating that The Braun Corporation had applied for a Significant Source Modification to a Part 70 Operating Permit to construct a stationary motor vehicle conversion plant with dry filters for air pollution control. The notice also stated that OAM proposed to issue a Significant Source Modification and provided information on how the public could review the proposed Significant Source Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Source Modification to a Part 70 Operating Permit should be issued as proposed.

On April 27, 2000, Ken DeRolf of DECA, submitted comments on the proposed Significant Source Modification to a Part 70 Operating Permit on behalf of the applicant. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded.**

**Comment 1:**

The Table of Contents (page 3 of 37) lists Section D.2 which is not included in the body of the permit received by the applicant. The permit is missing pages 31 and 32. The permit jumps from Sections D.1.7 to D.3.

**Response 1:**

The OAM procedure for a Significant Source Modification to a source with an issued Part 70 permit is to only change those permit pages affected by the modification. The modified pages, along with a revised cover page and table of contents constitute the permit package. It is then the responsibility of the applicant to insert the modified pages into the Part 70 permit.

In the case of this modification, there were no changes to Section D.2, so it was not included in the draft permit.

**Comment 2:**

The Table of Contents (page 4 of 37) lists the Certification Form, Emergency/Deviation Occurrence Reporting Form, and Quarterly Compliance Monitoring Report Form which are not included with the draft permit received by the applicant.

**Response 2:**

There were no changes to the Certification Form, the Emergency/Deviation Occurrence Reporting Form, or the Quarterly Compliance Monitoring Report Form. These forms were therefore not included in the draft permit.

**Comments 3, 5, 6, 7 and 8 all concern the need for dry filters. These comment are listed below, and then addressed in a combined response.**

**Comment 3:**

Section A.2 Emission Units and Pollution Control Equipment Summary

The spray booths listed in items (2), (5), (8), (11), and (13) are required to have dry filters, "Particulate emissions shall be controlled by dry filters." In the application it was demonstrated, using worse case scenarios, that the booths listed under A.2 (2), (5), (8), (11), and (13) are in compliance with 326 IAC 6-3-2 without add-on control. We request that the control condition be removed.

**Comment 5:**

D.1 Facility Description

The spray booths listed in items (2), (5), (8), (11), and (13) are required to have dry filters "Particulate emissions shall be controlled by dry filters." In the application it was demonstrated, using worse case scenarios, that the booths listed under A.2 (2), (5), (8), (11), and (13) are in compliance with 326 IAC 6-3-2 without add-on control. We request that the control condition be removed.

**Comment 6:**

D.1.3 Preventive Maintenance Plan

In the application it was demonstrated, using worse case scenarios, that the booths listed under D.1 (2), (5), (8), (11), and (13) are in compliance with 326 IAC 6-3-2 and by inference in D.1.1 of this permit. Since any dry filters which happen to be on these booths are not necessary for compliance with any applicable requirements, they are not to be considered as emission control equipment. The assembly areas and undercoating areas do not have any control equipment, yet are presumed to be in compliance with 326 IAC 6-3 and D.1.1. The only apparent reason for having the requirement of having the filters in place when the booths are in operation seems to be merely that there are dry filters present, and the fact that they are not necessary for compliance with any rules appears to have been ignored. There is no valid reason for this inconsistency. Please delete this requirement in its entirety because there is no legal basis for requiring the PMP.

**Comment 7:**

D.1.5 Particulate Matter

In the application it was demonstrated, using worse case scenarios, that the booths listed under D.1 (2), (5), (8), (11), and (13) are in compliance with 326 IAC 6-3-2 without add-on control. This is exactly the same (and by inference in D.1.1) as the assembly areas and undercoating areas which are not required to operate with dry filters, yet are presumed to be in compliance with 326 IAC 6-3 and D.1.1. The only apparent reason for having the requirements of having the filters in place when the booths are in operation seems to be merely that there are dry filters present, and the fact that they are not necessary for compliance with any rules appears to have been ignored. Please remove this condition in its entirety.

**Comment 8:**

D.1.6 (a) (b) Monitoring

In the application it was demonstrated, using worse case scenarios, that the booths listed under D.1 (2), (5), (8), (11), and (13) are in compliance with 326 IAC 6-3-2 (and by inference in D.1.1) without add-on control. This is exactly the same as the assembly areas and undercoating areas which are not required to have daily or monthly inspections of any sort. The only apparent reason for having the requirements of inspections at the refinishing facilities seems to be merely that there are dry filters present, and the fact that they are not necessary for compliance with any rules appears to have been ignored. Furthermore, the requirement for monthly inspections of the rooftops and ground around the stacks appear to have no air pollution validity at all. Any material deposited on the rooftops or ground is not airborne. The particulate matter rules allow for a limited amount of particulate matter to escape (the rules do not require zero emissions) which can accumulate over a period of time. Just because accumulations may be seen (on the applicants property) does not in any way constitute a violation, or is evidence of a violation, of any applicable rule. Please remove this condition in its entirety.

**Response to Comments 3, 5, 6, 7 and 8:**

The requirement for dry filters in surface coating booths has been questioned previously by the source, and is the subject of an ongoing appeal of the original Braun Corporation Part 70 permit, T131-7058-00017.

Complying with the requirements of 326 IAC 6-3-2 can be especially variable for paint booths. The actual substrate being painted and the solids content of the paint being used can affect the process weight rate, the gallons or pounds of solids used, transfer efficiency, or other factors that directly affect actual, allowable, or potential emissions. While permit applications contain representative information regarding these factors, relying on this information as an ongoing demonstration of compliance is difficult if the factors are not themselves enforceable. The OAM does not believe that it would be generally advisable to include these factors as permit conditions, to make them enforceable or to presume that they are so fixed they define a source's potential emissions because either could severely limit a source's operational flexibility.

The OAM has determined that properly operating the air pollution controls that are already in place is generally adequate to demonstrate compliance with 326 IAC 6-3 in lieu of a stack test and also assures compliance with applicable rules limiting fugitive dust, opacity, and (when necessary) Potential to Emit. Accordingly, no changes have been made to the permit.

**Comment 4:**

A.3 Insignificant Activities

Item (m) lists two burn-off ovens in Plant 3. There is only one burn-off oven which has two burners, one in the primary chamber, and one in the secondary chamber. The unit is natural gas-fired at less than 10,000,000 Btu per hour. Please correct this item.

**Response 4:**

Section A.3 has been revised as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes insignificant activities, as defined in 326 IAC 2-7-1(21).

(m) **One (1)** ~~Two (2)~~ Burn Off Oven~~s~~ at Plant 3 **equipped with two burners**, with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.

**Comment 9:**

D.1.7(a) Record Keeping Requirements

This condition is overly broad in its scope. The application of coatings to metal substrates in the assembly areas and in the undercoating areas complies with Condition D.1.2(a) by exclusive use of compliant coatings. These facilities do not propose to use daily volume-weighted averaging to comply with 326 IAC 8-2-9. As much, the amount of coating used is irrelevant to compliance with this rule which underlies Condition D.1.2(a). Further, neither 326 IAC 8-2-9 nor Condition D.1.2(a) speak to any limits on the usage of solvents as long as the coating complies with the rule. Therefore keeping records of solvent usage is onerous to the permittee and serves no purpose of protection of air quality.

The application of contact adhesive to a wood substrate on the Bus/ParaTransit Van assembly areas are specifically stated to be exempt from 326 IAC 8-1-6 in Condition D.1.2(b) because potential maximum emissions are less than 25 tons per year. The refinishing facilities are specifically and explicitly stated to be exempt from both 326 IAC 8-1-6 and 326 IAC 8-2-9 by Condition D.1.2(c). The application of adhesive to wood substrates in the assembly areas is specifically and explicitly exempted from the requirements of 326 IAC 8-2-12 by Condition D.1.2(e).

Due to the facts outlined in the above paragraphs, it is clear that the only information necessary to properly document compliance with any part of Condition D.1.2 are the VOC contents of the undercoating material and the adhesive applied to metal substrates assembly areas. The underlying rule does not speak to quantities used, dates of usage, amount of cleanup solvent used, or monthly volumes or weights if VOC emitted.

Condition D.1.7(a)(1) requires the permittee to keep records of not only the VOC content of coatings but the amount used as well. Condition D.1.2 does not speak to amounts of coating used whatsoever. Condition D.1.7(a)(2) requires that a log of dates of usage be kept.

Since the undercoating and assembly areas use as applied VOC content to document compliance with Condition D.1.2, the dates of usage have no bearing on compliance. Condition D.1.7(a)(3) requires a record of the cleanup solvent be kept. Since neither Condition D.1.2 nor 326 IAC 8-2-9 impose any limits on cleanup solvent used there can be no reason for this condition. Condition D.1.7(a)(4) requires records of total VOC usage each month. The permittee presumes this means total weight of VOC. Again, Condition D.1.2 and 326 IAC 8-2-9 do not speak to total VOC usage, so there is no valid reason for this condition to apply to the undercoating area or the application of adhesive to metal in the assembly areas.

Condition D.1.7(a)(5) requires a record of the weight of VOCs emitted for each compliance period. The amount of usage for any period is ignored by Condition D.1.2 and 326 IAC 8-2-9.

Beyond the application of adhesive to metal substrates in assembly areas, and the undercoating areas, the balance of all coating operations in Plant 4 were specifically and explicitly exempted from any requirements under 326 IAC 8. Since these other operations are exempt from any requirements, there is certainly no point in requiring that records be kept. If any change in equipment or method of operation would change the exempt status of these operations, the permittee is aware that another modification to the operating permit is required by 326 IAC 2-1. The fact that this application was submitted in the first place indicates that the permittee is so aware. If such an application is submitted, the status of these operations may be revisited at that time. But if no such changes are made, these operations are exempt from the requirements of 326 IAC 8 due to the fact that their potential emission (operating at full rated capacity, around the clock) is less than the threshold levels of applicability for those requirements. As such they cannot even reach the threshold emission levels unless changes are made in the operations. Therefore, no records should be required of these operations.

Requested Language - Delete Condition D.1.7 (a) in its entirety and replace with:

To document compliance with condition D.1.2 the Permittee shall maintain a record of the VOC content of the undercoating material and adhesives that are applied in the assembly areas. Records shall include either the Material Safety Data Sheets or VOC Data Sheets that verify the VOC content of the coatings used as applied.

**Response 9:**

The intent in drafting Condition D.1.7 (a) was to provide recordkeeping that allowed OAM to determine compliance with 326 IAC 8-2-9, as well as a determination that the potential emissions of VOC from the Bus/ParaTransit Van assembly areas and the refinishing surface coating booths remained below 25 tons per year,and hence exempt from 326 IAC 8-1-6. OAM agrees that the requirement for recordkeeping to determine 326 IAC 8-1-6 compliance can be simplified. The Potential to Emit from each of these processes is below 25 tons per year.

Recordkeeping is required to demonstrate compliance with 326 IAC 8-2-9. Condition D.1.2(a) has been revised to remove the word average when referring to the volatile organic compound (VOC) content of coatings, in recognition of the fact that the applicant is using all compliant coatings. In addition, Condition 1.7(a) has been revised to require recordkeeping of the as applied VOC content only, of the coatings applied to metal.

The revised conditions are as follows:

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8]

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the ~~average~~ volatile organic compound (VOC) content of coatings applied to metal substrates in the EnterVan and Bus/ParaTransit assembly and undercoating areas (Enter/Assem. No. 1, Enter/Un. No. 1, Enter/Assem. No. 2, Enter/Un. No. 2, Para/Assem. No. 1, Para/Un. No. 1, Para/Assem. No. 2 and Para/Un. No. 2) shall be limited to 3.5 pounds of VOCs per gallon of coating less water for extreme performance coatings, as delivered to the applicator.

D.1.7 Record Keeping Requirements

~~(a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly, and shall be complete and sufficient to establish compliance with the VOC emission limits established for coating of metal substrates in Condition D.1.2 (b).~~

~~(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;~~

~~(2) A log of the dates of use~~;

~~(3) The cleanup solvent usage for each month~~;

~~(4) The total VOC usage per assembly area for each month; and~~

~~(5) The weight of VOCs emitted per assembly area for each month~~.

(a) **To document compliance with Condition D.1.2(a), the Permittee shall maintain a record of the VOC content of the undercoating material and adhesives that are applied to metal substrates in the assembly areas. Records shall include either the Material Safety Data Sheets or VOC Data Sheets that verify the VOC content of the coatings used as applied.**

(b) To document compliance with Condition D.1.6, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Compliance Response Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**Comment 10:**

Condition D.1.7(b)

Objection No. 8 stated the reasons that Condition D.1.6 is invalid. In as much as Condition D.1.6 is invalid, any supporting record keeping requirements are equally invalid.

**Response 10:**

Besause OAM has determined that operation of dry filters is necessary to determine compliance with 326 IAC 6-3-2, compliance monitoring in the form of daily and monthly inspections and weekly observations of filter performance is also required. Therefore, no change has been made to the permit.

Upon further review, the OAM has decided to make the following changes to the Significant Source Modification to a Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded)**:

1. New language has been added to the permit to ensure that the burn off oven in Plant 3 complies with the incinerator rules in 326 IAC 4-2-2. In addition, all insignificant activities in Section D.4 have been moved to Section D.3, and Section D.4 has been eliminated.

   The revised section is a follows:

**SECTION D.3 FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activities:

(b) EnterVan Line No. 1 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(c) EnterVan Line No. 2 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(d) Bus/ParaTransit Van Line No. 1 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(e) Bus/ParaTransit Van Line No. 2 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(f) Axle/Door welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(g) Welding operations at Plant 3, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.

(h) Touch-Up Booth/Oven No. 1 at Plant 4 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

(i) Touch-Up Booth/Oven No. 2 at Plant 4 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

(j) APD Door Shop at Plant 3 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

(k) Powder Coating and Oven at Plant 3 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.

**(l) Powder Coating Oven at Plant 3 with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.**

**(m) One (1) ~~Two (2)~~ Burn Off Oven~~s~~ at Plant 3 equipped with two burners, with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.**

**(n) Space heaters with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

D.3.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the welding and surface coating operations shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$

where E = rate of emission in pounds per hour; and

P = process weight rate in tons per hour

**D.3.2 Incinerators [326 IAC 4-2-2]**

**Pursuant to 326 IAC 4-2-2, the burn off oven at Plant 3 shall:**

**(a) Consist of primary and secondary chambers or the equivalent;**

**(b) Be equipped with a primary burner unless burning wood products;**

**(c) Comply with 326 IAC 5-1 and 326 IAC 2;**

**(d) Be maintained properly as specified by the manufacturer and approved by the commissioner;**

**(e) Be operated according to the manufacturer's specifications and only burn waste approved by the commissioner;**

**(f) Comply with other state and/or local rules regarding installation and operation of incinerators;**

**(g) Be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;**

**(h) Not emit particulate matter in excess of five tenths (0.5) pounds of particulate matter per one thousand (1000) pounds of dry air exhaust at standard conditions corrected to fifty percent (50%) excess air; and**

**(i) Not create a nuisance or fire hazard.**

**Compliance Determination Requirements**

**D.3.3**, ~~D.3.2~~ Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.3.4** ~~D.3.3~~ Record Keeping and Reporting Requirements

There are no record keeping or reporting requirements for these facilities ~~this facility~~.

2. All insignificant activities in Section D.4 has been moved to Section D.3. Section D.4 has been eliminated from the permit.

~~**SECTION D.4 FACILITY OPERATION CONDITIONS**~~

~~Facility Description [326 IAC 2-7-5(15)]~~

~~Insignificant Activities with not covered by specific rules, included at the request of the source~~.

~~(l) Powder Coating Oven at Plant 3 with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.~~

~~(m) Two (2) Burn Off Ovens at Plant 3 with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour~~.

~~(n) Space heaters with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.~~

~~(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)~~

# Indiana Department of Environmental Management
# Office of Air Management

## Technical Support Document (TSD) for the Second Significant Source Modification to a Part 70 Operating Permit

**Source Background and Description**

| | |
|---|---|
| **Source Name:** | **The Braun Corporation** |
| **Source Location:** | **623 West 11th Street, Winamac, Indiana 46996** |
| **County:** | **Pulaski** |
| **SIC Code:** | **3711** |
| **Operation Permit No.:** | **T 131-7058-00017** |
| **Operation Permit Issuance Date:** | **April 20, 1999** |
| **Significant Source Modification No.:** | **131-11788-00017** |
| **Permit Reviewer:** | **Patrick T. Brennan/MES** |

The Office of Air Management (OAM) has reviewed a modification application from The Braun Corporation relating to the operation of a stationary motor vehicle conversion plant.

**History**

On January 26, 2000, The Braun Corporation submitted an application to the OAM requesting to increase production capacity of motor vehicle conversions for enhanced access to the physically challenged. The source was issued a Part 70 permit on April 20, 1999, the First Significant Permit Modification was issued on August 2, 1999, and the First Administrative Amendment was issued on September 14, 1999.

The source is now planning a major reconfiguration and capacity increase. The four (4) ParaTransit Van Lines, currently operating at a capacity of seven (7) vehicles per day each, will be combined into two (2) U shaped lines, each with a capacity of twelve (12) vehicles per day. The two (2) existing EnterVan lines will be lengthened and other changes will be made to increase capacity from eight (8) to fifteen (15) vehicles per day at each line. The single undercoating area will be dismantled and replaced with undercoating areas at the end of each line ParaTransit Van and EnterVan line. One (1) booth to paint trim parts (flares) will also be added. As with the current permit at this source, to facilitate rule compliance, all production lines are now classified as separate emission units for assembly and surface coating

**Proposed Changes**

The following changes have been made to the Part 70 operating permit. Deleted language appears as ~~strikeouts~~, new language is **bolded**.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Thirteen (13) surface coating ~~booths~~ **facilities and assembly areas** in Plant 4, described as follows:

(1) EnterVan Line No. 1 assembly area, identified as Enter/Assem. No. 1, with a maximum rating of ~~8.0~~ **15.0** vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(2) EnterVan Line No. 1 refinishing surface coating booth, identified as Enter/Ref. No. 1, with a maximum rating of ~~8.0~~ **15.0** vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Enter 1. This facility operates independently of all other refinishing surface coating facilities.

**(3) EnterVan Line No. 1 undercoating area, identified as Enter/Un. No. 1, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.**

~~(3)~~ **(4)** EnterVan Line No. 2 assembly area, identified as Enter/Assem. No. 2, with a maximum rating of ~~8.0~~ **15.0** vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

~~(4)~~ **(5)** EnterVan Line No. 2 refinishing surface coating booth, identified as Enter/Ref. No. 2, with a maximum rating of ~~8.0~~ **15.0** vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Enter 2. This facility operates independently of all other refinishing surface coating facilities.

**(6) EnterVan Line No. 2 undercoating area, identified as Enter/Un. No. 2, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.**

(**7**) **Bus/ParaTransit Van Line No. 1 assembly area, identified as Para/Assem. No. 1, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.**

**(8) Bus/ParaTransit Van Line No.1 refinishing surface coating booth, identified as Para/Ref. 1, with a maximum rating of 12.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 1. This facility operates independently of all other refinishing surface coating facilities.**

**(9) Bus/ParaTransit Van Line No.1 undercoating area, identified as Para/Un. No. 1, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.**

~~(5)~~ **(10) Bus/**ParaTransit Van Line No. 2 assembly area, identified as Para/Assem. No. 2, with a maximum rating of ~~7.0~~ **12.0** vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

~~(6)~~ **(11) Bus/**ParaTransit Van Line No. 2 refinishing surface coating booth, identified as Para/Ref. 2, with a maximum rating of ~~7.0~~ **12.0** vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 2. This facility operates independently of all other refinishing surface coating facilities.

**(12) Bus/ParaTransit Van Line No. 2 undercoating area, identified as Para/Un. No. 2, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.**

**(13) Flare Paint Shop equipped with one (1) surface coating booth, identified as FP No. 1, with a maximum rating of 54.0 flare sets per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID FP 1. This facility operates independently of all other surface coating facilities.**

~~(7) ParaTransit Van Line No. 3 assembly area, identified as Para/Assem. No. 3, with a maximum rating of 7.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.~~

~~(8) ParaTransit Van Line No. 3 refinishing surface coating booth, identified as Para/Ref 3, with a maximum rating of 7.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 3. This facility operates independently of all other refinishing surface coating facilities.~~

~~(9) ParaTransit Van Line No. 4 assembly area, identified as Para/Assem. No. 4, with a maximum rating of 7.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.~~

~~(10) ParaTransit Van Line No. 4 refinishing surface coating booth, identified as Para/Ref 4, with a maximum rating of 7.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 4. This facility operates independently of all other refinishing surface coating facilities.~~

~~(11) Bus/ParaTransit Van Line assembly area, identified as Bus/Assem., with a maximum rating of 7.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.~~

~~(12) Bus/ParaTransit Van Line refinishing surface coating booth, identified as Bus/Ref, with a maximum rating of 7.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Bus/Para. This facility operates independently of all other refinishing surface coating facilities.~~

~~(13) Undercoating operation, identified as UN1, with a maximum rating of 48.0 chassis per day. Emissions are fugitive. This facility operates independently of all other surface coating facilities.~~

A.3 ~~Specifically Regulated~~ Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes insignificant activities, as defined in 326 IAC 2-7-1(21).

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

~~(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.~~

**(b) EnterVan Line No. 1 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(c) EnterVan Line No. 2 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(d) Bus/ParaTransit Van Line No. 1 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(e) Bus/ParaTransit Van Line No. 2 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(f) Axle/Door welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(g) Welding operations at Plant 3, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(h) Touch-Up Booth/Oven No. 1 at Plant 4 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.**

**(i) Touch-Up Booth/Oven No. 2 at Plant 4 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.**

**(j) APD Door Shop at Plant 3 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.**

**(k) Powder Coating and Oven at Plant 3 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.**

**(l) Powder Coating Oven at Plant 3 with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.**

**(m) Two (2) Burn Off Ovens at Plant 3 with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.**

**(n) Space heaters with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.**

**D.1 FACILITY OPERATION CONDITIONS - Surface Coating Areas ~~Booths~~**

Facility Description [326 IAC 2-7-5(15)]

Thirteen (13) surface coating ~~booths~~ **facilities and assembly areas** in Plant 4, described as follows:

(1) EnterVan Line No. 1 assembly area, identified as Enter/Assem. No. 1, with a maximum rating of ~~8.0~~ **15.0** vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

(2) EnterVan Line No. 1 refinishing surface coating booth, identified as Enter/Ref. No. 1, with a maximum rating of ~~8.0~~ **15.0** vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Enter 1. This facility operates independently of all other refinishing surface coating facilities.

**(3) EnterVan Line No. 1 undercoating area, identified as Enter/Un. No. 1, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.**

~~(3)~~ **(4)** EnterVan Line No. 2 assembly area, identified as Enter/Assem. No. 2 with a maximum rating of ~~8.0~~ **15.0** vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

~~(4)~~ **(5)** EnterVan Line No. 2 refinishing surface coating booth, identified as Enter/Ref. No. 2, with a maximum rating of ~~8.0~~ **15.0** vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Enter 2. This facility operates independently of all other refinishing surface coating facilities.

**(6) EnterVan Line No. 2 undercoating area, identified as Enter/Un. No. 2, with a maximum rating of 15.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.**

(**7) Bus/ParaTransit Van Line No. 1 assembly area, identified as Para/Assem. No. 1, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.**

**(8) Bus/ParaTransit Van Line No.1 refinishing surface coating booth, identified as Para/Ref. 1, with a maximum rating of12.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 1. This facility operates independently of all other refinishing surface coating facilities.**

**(9) Bus/ParaTransit Van Line No. 1 undercoating area, identified as Para/Un. No. 1, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.**

~~(5)~~ **(10) Bus/**ParaTransit Van Line No. 2 assembly area, identified as Para/Assem. No. 2, with a maximum rating of ~~7.0~~ **12.0** vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.

~~(6)~~ **(11) Bus/**ParaTransit Van Line No. 2 refinishing surface coating booth, identified as Para/Ref. 2, with a maximum rating of ~~7.0~~ **12.0**vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 2. This facility operates independently of all other refinishing surface coating facilities.

**(12) Bus/ParaTransit Van Line No. 2 undercoating area, identified as Para/Un. No. 2, with a maximum rating of 12.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other undercoating areas.**

**(13) Flare Paint Shop equipped with one (1) surface coating booth, identified as FP No. 1, with a maximum rating of 54.0 flare sets per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID FP 1. This facility operates independently of all other surface coating facilities.**

~~(7) ParaTransit Van Line No. 3 assembly area, identified as Para/Assem. No. 3, with a maximum rating of 7.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.~~

~~(8) ParaTransit Van Line No. 3 refinishing surface coating booth, identified as Para/Ref 3, with a maximum rating of 7.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 3. This facility operates independently of all other refinishing surface coating facilities.~~

~~(9) ParaTransit Van Line No. 4 assembly area, identified as Para/Assem. No. 4, with a maximum rating of 7.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.~~

~~(10) ParaTransit Van Line No. 4 refinishing surface coating booth, identified as Para/Ref 4, with a maximum rating of 7.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Para 4. This facility operates independently of all other refinishing surface coating facilities.~~

~~(11) Bus/ParaTransit Van Line assembly area, identified as Bus/Assem., with a maximum rating of 7.0 vans per day. Particulate emissions are fugitive. This facility operates independently of all other assembly areas.~~

~~(12) Bus/ParaTransit Van Line refinishing surface coating booth, identified as Bus/Ref, with a maximum rating of 7.0 vans per day. Particulate emissions shall be controlled by dry filters, then exhausted at Stack/Vent ID Bus/Para. This facility operates independently of all other refinishing surface coating facilities.~~

~~(13) Undercoating operation, identified as UN1, with a maximum rating of 48.0 chassis per day. Emissions are fugitive. This facility operates independently of all other surface coating facilities.~~

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM emissions from the Enter/Assem. No. 1, Enter/Ref. No. 1, **Enter/Un. No. 1**, Enter/Assem. No. 2, Enter/Ref. No. 2, **Enter/Un. No. 2, Para/Assem. No. 1, Para/Ref. No. 1**, **Para/Un. No. 1** Para/Assem. No. 2, Para/Ref. No. 2, **Para/Un. No. 2 and FP No. 1** ~~Para/Assem. No. 3, Para/Ref. No. 3, Para/Assem. No. 4, Para/Ref. No. 4, Bus/Assem, Bus/Ref. and UN1~~ surface coating ~~booths~~ **areas** shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and

P = process weight rate in tons per hour

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8]

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the average volatile organic compound (VOC) content of coatings applied to metal substrates in the EnterVan ~~Line~~ and **Bus/ParaTransit** assembly **and undercoating** areas (Enter/Assem. No. 1, **Enter/Un. No. 1**, ~~and~~ Enter/Assem. No. 2, **Enter/Un. No. 2, Para/Assem. No. 1, Para/Un. No. 1, Para/Assem. No. 2 and Para/Un. No. 2**) ~~and the Undercoating facility (UN1)~~ shall be limited to 3.5 pounds of VOCs per gallon of coating less water for extreme performance coatings, as delivered to the applicator. ~~for any calender day~~.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

~~(b) The application of adhesives to metal substrates in the ParaTransit Van and Bus/ParaTransit Van assembly areas (Para/Assem. No. 2, Para/Assem. No. 3, Para/Assem. No. 4 and Bus/Assem.) is exempt from 326 IAC 8-2-9 because potential emissions as delivered to the applicator are less than 15 pounds per day per facility. Any change or modification that would cause VOC emissions from these operations to be greater than or equal to fifteen (15) pounds per day per facility will require prior approval by IDEM, OAM.~~

~~(c)~~ **(b)** Contact adhesives in the ~~ParaTransit Van and~~ Bus/ParaTransit Van assembly areas (Para/Assem. No. **1** ~~2~~ **and** Para/Assem. No. **2** ~~3, Para/Assem. No. 4 and Bus/Assem~~.) are applied to wood substrates and could be subject to 326 IAC 8-1-6, but are exempt because potential VOC emissions from each production facility are below 25.0 TPY. Any change or modification to any production facility that may cause potential emissions of VOC to increase to 25 tons per year, shall require prior approval by OAM and use of Best Available Control Technology.

~~(d)~~ **(c)** The refinishing surface coating booths (Enter/Ref. No. 1, Enter/Ref. No. 2, Para/Ref. No. **1** ~~2~~ **and** Para/Ref. No. **2** ~~3, Para/Ref. No. 4 and Bus/Ref.~~) are exempt from the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) by 326 IAC 8-2-9(b)(3), because they are auto refinishing operations. These operations could be subject to 326 IAC 8-1-6 (BACT), but are exempt because each production facility has potential VOC emissions less than 25 tons per year. Any change or modification to any production facility that may cause potential emissions of VOC to increase to 25 tons per year, shall require prior approval by OAM and use of Best Available Control Technology.

~~(e)~~ **(d)** For the purposes of enforcing Conditions D.1.2**(b)** ~~(c)~~ and D.1.2**(c)** ~~(d)~~, a production facility is defined as one ~~ParaTransit Van,~~ EnterVan or Bus/ParaTransit Van production line, consisting of one **(1)** assembly area, ~~and~~ one **(1)** refinishing surface coating **area and one (1) undercoating area** ~~booth~~. Each production line at the source operates independently of all other lines and is treated as a separate facility.

~~(f)~~ **(e)** The application of adhesives to wood substrates in the EnterVan ~~ParaTransit Van~~ and Bus/ParaTransit Van assembly areas (Enter/Assem. No. 1, Enter/Assem. No. 2, Para/Assem. No. **1** ~~2~~ **and** Para/Assem. No. **2** ~~3, Para/Assem. No. 4 and Bus/Assem.~~) is exempt from 326 IAC 8-2-12 because these coatings are applied to rough structural plywood on the bus and van floors, which are not considered furniture.

**Compliance Determination Requirements**

D.1.5 Particulate Matter (PM)

The dry filters for PM control shall be in place at all times when the Enter/Ref. No. 1, Enter/Ref. No. 2, Para/Ref. No. **1** ~~2~~, Para/Ref. No. **2** ~~3~~ **and FP1** ~~Para/Ref. No. 4 and Bus/Ref.~~ surface coating booths are in operation.

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

D.1.6 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (Enter 1, Enter 2, Para **1** ~~2~~, Para **2 and FP1** ~~3, Para 4 and Bus/Para~~) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

D.1.7 Record Keeping Requirements

(a) To document compliance with Condition D.1.2 ~~(b)~~, the Permittee shall maintain records in accordance with (1) through **(5)** ~~(4)~~ below. Records maintained for (1) through **(5)** ~~(4)~~ shall be taken **monthly** ~~daily~~, and shall be complete and sufficient to establish compliance with the ~~less than 15 pounds per day per assembly area~~ VOC emission limits established for coating of metal substrates in Condition D.1.2 ~~(b)~~.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

**(3) The cleanup solvent usage for each month**;

**(4)** ~~(3)~~ The total VOC usage per assembly area for each **month** ~~day~~; and

**(5)** ~~(4)~~ The weight of VOCs emitted per assembly area for each **month** ~~day~~.

(b) To document compliance with Condition D.1.6, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Compliance Response Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**SECTION D.3 FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activities:

~~(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.~~

**(b) EnterVan Line No. 1 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(c) EnterVan Line No. 2 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(d) Bus/ParaTransit Van Line No. 1 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(e) Bus/ParaTransit Van Line No. 2 welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(f) Axle/Door welding operations at Plant 4, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(g) Welding operations at Plant 3, emitting less than 25 pounds per day of PM and less than 1 pound per day of any combination of HAPs.**

**(h) Touch-Up Booth/Oven No. 1 at Plant 4 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.**

**(i) Touch-Up Booth/Oven No. 2 at Plant 4 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.**

**(j) APD Door Shop at Plant 3 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.**

**(k) Powder Coating and Oven at Plant 3 emitting less than 15 pounds per day of VOC, less than 25 pounds per day of PM and less than 1 ton per year of any combination of HAPs.**

**(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)**

**Emission Limitations and Standards [326 IAC 2-7-5(1)]**

D.3.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the welding **and surface coating** operations shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

**Compliance Determination Requirement**

D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

D.3.3 Record Keeping and Reporting Requirements

There are no record keeping or reporting requirements for this facility.

**SECTION D.4 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15)]**

**Insignificant Activities with not covered by specific rules, included at the request of the source.**

**(l) Powder Coating Oven at Plant 3 with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.**

**(m) Two (2) Burn Off Ovens at Plant 3 with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.**

**(n) Space heaters with natural gas-fired combustion of less than ten million (10,000,000) Btu per hour.**

**(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)**

**Existing Approvals**

The source was issued a Part 70 Operating Permit T131-7058-00017 on April 20, 1999. This permit has subsequently been modified and amended as follows:

(a) First Significant Permit Modification, 131-10831-00017, issued on August 2, 1999.

(b) First Administrative Amendment, 131-11117-00017, issued on September 14, 1999.

**Enforcement Issue**

There are no enforcement actions pending.

**Stack Summary**

Because the entire Plant 4 operation has been reconfigured, all stacks at the plant have been listed.

| Stack ID | Operation | Height (feet) | Diameter (feet) | Flow Rate (acfm) | Temperature (EF) |
|---|---|---|---|---|---|
| Enter 1 | Surface Coating | 30.5 | 2.50 | 11,700 | 68 |
| Enter 2 | Surface Coating | 30.5 | 2.50 | 11,700 | 68 |
| Para 1 | Surface Coating | 31.0 | 4.00 | 29,300 | 68 |
| Para 2 | Surface Coating | 31.0 | 4.00 | 29,300 | 68 |
| FP1 | Surface Coating | 30.5 | 2.50 | 10,000 | 68 |
| Touch Up No. 1* | Surface Coating | 30.5 | 2.00 | 9,000 | 100 |
| Touch Up No. 2* | Surface Coating | 30.5 | 2.00 | 9,000 | 100 |

*Insignificant Activity

**Recommendation**

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 24, 2000. Additional information was received on March 1, 2000.

**Emission Calculations**

See pages 1 through 6 of 6 of Appendix A of this document for detailed emissions calculations.

**Potential To Emit of Modification**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| Pollutant | Potential To Emit (tons/year) |
|---|---|
| PM | 31.9 |
| $PM_{10}$ | 31.9 |
| $SO_2$ | 0.0 |
| VOC | 45.9 |
| CO | 0.0 |
| $NO_X$ | 0.0 |

| HAPs | Potential To Emit (tons/year) |
|---|---|
| Toluene | 4.57 |
| Hexane | 2.65 |
| Xylene | 2.25 |
| MIBK | 0.57 |
| Glycol Ethers | 0.25 |
| Ethyl Benzene | 0.22 |
| TOTAL | 8.70 |

**Justification for Modification**

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4) since the potential to emit of VOC and $PM_{10}$ are greater than twenty-five (25) tons per year.

**County Attainment Status**

The source is located in Pulaski County.

| Pollutant | Status |
|---|---|
| $PM_{10}$ | attainment |
| $SO_2$ | attainment |
| $NO_2$ | attainment |
| Ozone | attainment |
| CO | attainment |
| Lead | attainment |

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and $NO_X$ emissions are considered when evaluating the rule applicability relating to the ozone standards. Pulaski County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Pulaski County has been classified as attainment or unclassifiable for the remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

**Source Status**

Existing and Modified Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

| Pollutant | Existing Source Potential Emissions (tons/year) | Proposed Modification Potential Emissions (tons/year) | Modified Source Potential Emissions (tons/year) |
|---|---|---|---|
| PM | 46.0 | 31.9 | 77.9 |
| $PM_{10}$ | 46.0 | 31.9 | 77.9 |
| $SO_2$ | 0.0 | 0.0 | 0.0 |
| VOC | 156 | 45.9 | 202 |
| CO | 0.0 | 0.0 | 0.0 |
| $NO_X$ | 0.0 | 0.0 | 0.0 |
| Single HAP | 20.3 | 4.57 | 24.9 |
| Combination of HAPS | 38.6 | 8.70 | 47.3 |

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

(b) These emissions are based upon information contained in Permit 131-10831 and the spreadsheets attached contained in Appendix A.

**Potential to Emit of the Entire Source After Issuance of Modification**

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

| | Potential to Emit (tons/year) | | | | | | |
|---|---|---|---|---|---|---|---|
| Process/facility | PM | $PM_{10}$ | $SO_2$ | VOC | CO | $NO_X$ | HAPs |
| Proposed Modification | 31.9 | 31.9 | 0.0 | 45.9 | 0.0 | 0.0 | 8.70 |
| Entire Source | 77.9 | 77.0 | 0.0 | 202 | 0.0 | 0.0 | 47.3 |
| PSD or Offset Threshold Level | 250 | 250 | 250 | 250 | 250 | 250 | - |

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

**Federal Rule Applicability**

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

**State Rule Applicability - Entire Source**

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source located in Pulaski County is a minor source under PSD Rules since none of the criteria pollutants have a potential to be emitted at a rate of two hundred and fifty (250) tons per year or greater and it is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**State Rule Applicability - Individual Facilities**

The applicability of the OAM rules governing surface coating operations is summarized in the following table for the various surface coating and assembly areas.

| Facility | Applicable Rule(s) |
|---|---|
| EnterVan Line No. 1 Assembly<br><br>(Enter/Assem. No. 1) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-9 applies for metal substrates (compliant coatings)<br>326 IAC 8-1-6 does not apply for wood and rubber substrates, (VOC PTE less than 25 TPY)<br>326 IAC 8-2-12 does not apply (wood substrates are not furniture) |
| EnterVan Line No. 1 Refinishing<br>(Enter/Ref. No. 1) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-2 does not apply (not automobile assembly)<br>326 IAC 8-2-9 does not apply (automobile refinishing)<br>326 IAC 8-1-6 does not apply (VOC PTE less than 25 TPY) |
| EnterVan Line No. 1 Undercoating<br>(Enter/Un. No. 1) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-9 applies for metal substrates (compliant coatings) |
| EnterVan Line No. 2 Assembly<br><br>(Enter/Assem. No. 2) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-9 applies for metal substrates (compliant coatings)<br>326 IAC 8-1-6 does not apply for wood and rubber substrates, (VOC PTE less than 25 TPY)<br>326 IAC 8-2-12 does not apply (wood substrates are not furniture) |
| EnterVan Line No. 2 Refinishing<br>(Enter/Ref. No. 2) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-2 does not apply (not automobile assembly)<br>326 IAC 8-2-9 does not apply (automobile refinishing)<br>326 IAC 8-1-6 does not apply (VOC PTE less than 25 TPY) |
| EnterVan Line No. 2 Undercoating<br>(Enter/Un. No. 2) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-9 applies for metal substrates (compliant coatings) |
| Bus/ParaTransit Van Line No. 1 Assembly<br><br>(Para/Assem. No. 1) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-9 applies for metal substrates (compliant coatings)<br>326 IAC 8-1-6 does not apply for wood and rubber substrates, (VOC PTE less than 25 TPY)<br>326 IAC 8-2-12 does not apply (wood substrates are not furniture) |
| Bus/ParaTransit Van Line No. 1 Refinishing<br>(Para/Ref. No. 1) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-2 does not apply (not automobile assembly)<br>326 IAC 8-2-9 does not apply (automobile refinishing)<br>326 IAC 8-1-6 does not apply (VOC PTE less than 25 TPY) |

| Facility | Applicable Rule(s) |
|---|---|
| Bus/ParaTransit Van Line No. 1 Undercoating (Para/Un. No. 1) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-9 applies for metal substrates (compliant coatings) |
| Bus/ParaTransit Van Line No. 2 Assembly (Para/Assem. No. 2) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-9 applies for metal substrates (compliant coatings)<br>326 IAC 8-1-6 does not apply for wood and rubber substrates, (VOC PTE less than 25 TPY)<br>326 IAC 8-2-12 does not apply (wood substrates are not furniture) |
| Bus/ParaTransit Van Line No. 2 Refinishing (Para/Ref. No. 2) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-2 does not apply (not automobile assembly)<br>326 IAC 8-2-9 does not apply (automobile refinishing)<br>326 IAC 8-1-6 does not apply (VOC PTE less than 25 TPY) |
| Bus/ParaTransit Van Line No. 2 Undercoating (Para/Un. No. 2) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-9 applies for metal substrates (compliant coatings) |
| Flare Paint Shop (FP1) | 326 IAC 6-3-2 applies for overspray<br>326 IAC 8-2-2 does not apply (not automobile assembly)<br>326 IAC 8-2-9 does not apply (plastic substrate)<br>326 IAC 8-1-6 does not apply (VOC PTE less than 25 TPY) |

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) overspray from the Enter/Assem. No. 1, Enter/Ref. No. 1, Enter/Un. No. 1, Enter/Assem. No. 2, Enter/Ref. No. 2, Enter/Un. No. 2 Para/Assem. No. 1, Para/Ref. No. 1, Para/Un. No. 1, Para/Assem. No. 2, Para/Ref. No. 2, Para/Un. No. 2 and FP1 surface coating facilities shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

326 IAC 8-1-6 (BACT) and 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

Because the surface coating operations in the bus and van assembly areas ( Enter/Assem. No. 1, Enter/Assem. No. 2, Para/Assem. No. 1 and Para/Assem No. 2) apply coatings to wood and rubber substrates, 326 IAC 8-1-6 could be applicable. However, because potential VOC emissions from each production facility are below 25.0 TPY, this rule does not apply. For the purposes of this rule, a production facility is defined as one EnterVan or Bus/ParaTransit line, consisting of one assembly area and one refinishing surface coating booth. Each production line at the source operates independently of all other lines and is treated as a separate facility.

The wood substrates coated are CDX rough structural plywood on the bus and van floors, not furniture. Therefore, 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating) is not applicable.

Because the surface coating operations flare painting faclity (FP1) apply coatings to plastic substrates, 326 IAC 8-1-6 could be applicable. However, because potential VOC emissions from this facility are below 25.0 TPY, this rule does not apply.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings delivered to the applicators when coating metal substrates in the EnterVan and Bus/ParaTransit assembly and undercoating areas (Enter/Assem. No. 1, Enter/Un. No. 1, Enter/Assem. No. 2, Enter/Un. No. 2, Para/Assem. No. 1, Para/Un. No. 1, Para/Assem. No. 2 and Para/Un. No. 2) shall be limited to 3.5 pounds of VOCs per gallon of coating less water for extreme performance coatings.

Based on the MSDS submitted by the source and calculations made, these facilities are in compliance with this requirement.

(b) Contact adhesives in the Bus/ParaTransit Van assembly areas (Para/Assem. No. 1 and No. 2) are applied to wood substrates and could be subject to 326 IAC 8-1-6, but are exempt because potential VOC emissions from each production facility are below 25.0 TPY. The wood substrates coated are CDX rough structural plywood on the bus and van floors, and are not considered furniture. Therefore, 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating) is not applicable.

(c) The use of coatings for automobile refinishing in the refinishing surface coating booths (Enter/Ref. No. 1, Enter/Ref. No. 2, BusPara/Ref. No. 1 and BusPara/Ref. No. 2) are exempt from the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) by 326 IAC 8-2-9(b)(3). These operations could be subject to 326 IAC 8-1-6 (BACT), but are exempt because each production facility has potential VOC emissions less than 25 tons per year. These operations are not subject to 326 IAC 8-2-2 because they are not automobile assembly.

(d) All surface coatings in the flare painting facility (FP1) are applied to plastic substrates. Therefore, these operations are not subject to 326 IAC 8-2-9.

**Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in permit Section D are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in permit Section D. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(1) The Enter/Ref. No. 1, Enter/Ref. No. 2, Bus/Para/Ref. No. 1, BusPara/Ref. No. 2 and FP1 surface coating booths have applicable compliance monitoring conditions as specified below:

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the booths are in operation.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an overspray emission, evidence of overspray emission, or other abnormal emission is observed.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters for the surface coating operations must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations).

**Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

(a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

(b) See Appendix A, pages 3 through 6, of this document for detailed air toxic calculations.

**Conclusion**

The operation of this stationary motor vehicle conversion plant shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 131-11788-00017.

**Appendix A: Emissions Calculations**
**VOC and Particulate**
**From Surface Coating Operations at Plant 4**

**Company Name:** The Braun Corporation
**Address City IN Zip:** 623 West 11th Street, Winamac, IN 46996
**Source Modification:** 131-11788
**Plt ID:** 131-00017
**Reviewer:** MES/Patrick T. Brennan
**Date:** January 21, 2000

| Material<br>**PLANT #4** | Density (lb/gal) | Weight % Volatile (H20 & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Vol (solids) | Gal of Mat (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential tons per year | lb VOC /gal solids | Transfer Efficiency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***EnterVan Line No. 1, Assembly*** | | | | | | | | | | | | | | | | |
| Contact Adhesive | 6.59 | 53.00% | 0.0% | 53.0% | 0.0% | 47.00% | 2.0000 | 0.625 | 3.49 | 3.49 | 4.37 | 104.78 | 19.12 | 8.48 | 7.43 | 50% |
| RTV Sealant | 8.76 | 5.00% | 0.0% | 5.0% | 0.0% | 95.00% | 0.3130 | 0.625 | 0.44 | 0.44 | 0.09 | 2.06 | 0.38 | 0.00 | 0.46 | 100% |
| ***Subtotal:*** | | | | | | | | | | | ***4.45*** | ***106.84*** | ***19.50*** | ***8.48*** | | |
| | | | | | | | | | | | | | | | | |
| ***EnterVan Line No. 1, Refinishing*** | | | | | | | | | | | | | | | | |
| DP48LF Primer | 11.90 | 36.15% | 0.0% | 36.15% | 0.0% | 38.81% | 0.2810 | 0.625 | 4.30 | 4.30 | 0.76 | 18.13 | 3.31 | 2.92 | 11.08 | 50% |
| DP402 Catalyst | 7.75 | 67.10% | 0.0% | 67.10% | 0.0% | 27.51% | 0.1410 | 0.625 | 5.20 | 5.20 | 0.46 | 11.00 | 2.01 | 0.49 | 18.90 | 50% |
| DBU Base | 8.18 | 59.16% | 0.0% | 59.16% | 0.0% | 31.51% | 0.1410 | 0.625 | 4.84 | 4.84 | 0.43 | 10.24 | 1.87 | 0.64 | 15.36 | 50% |
| DCU 2082 Clear | 7.90 | 52.49% | 0.0% | 52.49% | 0.0% | 39.10% | 0.0780 | 0.625 | 4.15 | 4.15 | 0.20 | 4.85 | 0.89 | 0.40 | 10.61 | 50% |
| DCH 2083 Fast | 7.83 | 57.57% | 0.0% | 57.57% | 0.0% | 34.78% | 0.0230 | 0.625 | 4.51 | 4.51 | 0.06 | 1.56 | 0.28 | 0.10 | 12.96 | 50% |
| DCH 2084 Medium | 7.13 | 57.57% | 0.0% | 57.57% | 0.0% | 34.78% | 0.0230 | 0.625 | 4.10 | 4.10 | 0.06 | 1.42 | 0.26 | 0.10 | 11.80 | 50% |
| DCH 2085 Slow | 7.90 | 57.00% | 0.0% | 57.00% | 0.0% | 35.00% | 0.0230 | 0.625 | 4.50 | 4.50 | 0.06 | 1.55 | 0.28 | 0.11 | 12.87 | 50% |
| DCH 2086 Very Slow | 7.93 | 56.90% | 0.0% | 56.90% | 0.0% | 35.63% | 0.0230 | 0.625 | 4.51 | 4.51 | 0.06 | 1.56 | 0.28 | 0.11 | 12.66 | 50% |
| DTL-1 Thinner | 6.69 | 100.00% | 19.6% | 80.40% | 0.0% | 0.00% | 0.1560 | 0.625 | 5.38 | 5.38 | 0.52 | 12.59 | 2.30 | 0.00 | ERR | 50% |
| DX103 Prep Solvent | 6.57 | 99.89% | 0.0% | 99.89% | 0.0% | 1.00% | 0.0390 | 0.625 | 6.56 | 6.56 | 0.16 | 3.84 | 0.70 | 0.00 | 656.28 | 50% |
| ABS 30G | 6.67 | 100.00% | 0.0% | 100.00% | 0.0% | 0.00% | 0.0780 | 0.625 | 6.67 | 6.67 | 0.33 | 7.81 | 1.42 | 0.00 | ERR | 50% |
| ***Subtotal:*** | | | | | | | | | | | ***3.11*** | ***74.53*** | ***13.60*** | ***4.87*** | | |
| | | | | | | | | | | | | | | | | |
| ***EnterVan Line No. 1, Undercoating*** | | | | | | | | | | | | | | | | |
| Black Rust Protection | 7.43 | 40.00% | 0.0% | 40.0% | 0.0% | 53.00% | 1.0000 | 0.625 | 2.97 | 2.97 | 1.86 | 44.58 | 8.14 | 6.10 | 5.61 | 50% |
| AA Water Base Rust Prot | 8.17 | 55.00% | 45.0% | 10.0% | 45.0% | 45.00% | 0.0630 | 0.625 | 1.49 | 0.82 | 0.03 | 0.77 | 0.14 | 0.06 | 1.82 | 90% |
| ***Subtotal:*** | | | | | | | | | | | ***1.89*** | ***45.35*** | ***8.28*** | ***6.17*** | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| ***EnterVan Line No. 2, Assembly*** | | | | | | | | | | | | | | | | |
| Contact Adhesive | 6.59 | 53.00% | 0.0% | 53.0% | 0.0% | 47.00% | 2.0000 | 0.625 | 3.49 | 3.49 | 4.37 | 104.78 | 19.12 | 8.48 | 7.43 | 50% |
| RTV Sealant | 8.76 | 5.00% | 0.0% | 5.0% | 0.0% | 95.00% | 0.3130 | 0.625 | 0.44 | 0.44 | 0.09 | 2.06 | 0.38 | 0.00 | 0.46 | 100% |
| ***Subtotal:*** | | | | | | | | | | | ***4.45*** | ***106.84*** | ***19.50*** | ***8.48*** | | |
| | | | | | | | | | | | | | | | | |
| ***EnterVan Line No. 2, Refinishing*** | | | | | | | | | | | | | | | | |
| DP48LF Primer | 11.90 | 36.15% | 0.0% | 36.15% | 0.0% | 38.81% | 0.2810 | 0.625 | 4.30 | 4.30 | 0.76 | 18.13 | 3.31 | 2.92 | 11.08 | 50% |
| DP402 Catalyst | 7.75 | 67.10% | 0.0% | 67.10% | 0.0% | 27.51% | 0.1410 | 0.625 | 5.20 | 5.20 | 0.46 | 11.00 | 2.01 | 0.49 | 18.90 | 50% |
| DBU Base | 8.18 | 59.16% | 0.0% | 59.16% | 0.0% | 31.51% | 0.1410 | 0.625 | 4.84 | 4.84 | 0.43 | 10.24 | 1.87 | 0.64 | 15.36 | 50% |
| DCU 2082 Clear | 7.90 | 52.49% | 0.0% | 52.49% | 0.0% | 39.10% | 0.0780 | 0.625 | 4.15 | 4.15 | 0.20 | 4.85 | 0.89 | 0.40 | 10.61 | 50% |
| DCH 2083 Fast | 7.83 | 57.57% | 0.0% | 57.57% | 0.0% | 34.78% | 0.0230 | 0.625 | 4.51 | 4.51 | 0.06 | 1.56 | 0.28 | 0.10 | 12.96 | 50% |
| DCH 2084 Medium | 7.13 | 57.57% | 0.0% | 57.57% | 0.0% | 34.78% | 0.0230 | 0.625 | 4.10 | 4.10 | 0.06 | 1.42 | 0.26 | 0.10 | 11.80 | 50% |
| DCH 2085 Slow | 7.90 | 57.00% | 0.0% | 57.00% | 0.0% | 35.00% | 0.0230 | 0.625 | 4.50 | 4.50 | 0.06 | 1.55 | 0.28 | 0.11 | 12.87 | 50% |
| DCH 2086 Very Slow | 7.93 | 56.90% | 0.0% | 56.90% | 0.0% | 35.63% | 0.0230 | 0.625 | 4.51 | 4.51 | 0.06 | 1.56 | 0.28 | 0.11 | 12.66 | 50% |
| DTL-1 Thinner | 6.69 | 100.00% | 19.6% | 80.40% | 0.0% | 0.00% | 0.1560 | 0.625 | 5.38 | 5.38 | 0.52 | 12.59 | 2.30 | 0.00 | ERR | 50% |
| DX103 Prep Solvent | 6.57 | 99.89% | 0.0% | 99.89% | 0.0% | 1.00% | 0.0390 | 0.625 | 6.56 | 6.56 | 0.16 | 3.84 | 0.70 | 0.00 | 656.28 | 50% |
| ABS 30G | 6.67 | 100.00% | 0.0% | 100.00% | 0.0% | 0.00% | 0.0780 | 0.625 | 6.67 | 6.67 | 0.33 | 7.81 | 1.42 | 0.00 | ERR | 50% |
| ***Subtotal:*** | | | | | | | | | | | ***3.11*** | ***74.53*** | ***13.60*** | ***4.87*** | | |
| | | | | | | | | | | | | | | | | |
| ***EnterVan Line No. 2, Undercoating*** | | | | | | | | | | | | | | | | |
| Black Rust Protection | 7.43 | 40.00% | 0.0% | 40.0% | 0.0% | 53.00% | 1.0000 | 0.625 | 2.97 | 2.97 | 1.86 | 44.58 | 8.14 | 6.10 | 5.61 | 50% |
| AA Water Base Rust Prot | 8.17 | 55.00% | 45.0% | 10.0% | 45.0% | 45.00% | 0.0630 | 0.625 | 1.49 | 0.82 | 0.03 | 0.77 | 0.14 | 0.06 | 1.82 | 90% |
| ***Subtotal:*** | | | | | | | | | | | ***1.89*** | ***45.35*** | ***8.28*** | ***6.17*** | | |

**Appendix A: Emissions Calculations**
**VOC and Particulate**
**From Surface Coating Operations at Plant 4**

**Company Name:** The Braun Corporation
**Address City IN Zip:** 623 West 11th Street, Winamac, IN 46996
**Source Modification:** 131-11788
**Plt ID:** 131-00017
**Reviewer:** MES/Patrick T. Brennan
**Date:** January 21, 2000

| Material<br>**PLANT #4 (cont'd)** | Density (lb/gal) | Weight % Volatile (H20 & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Vol (solids) | Gal of Mat (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential tons per year | lb VOC /gal solids | Transfer Efficiency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Bus/ParaTransit Van Line No. 1,*** | ***Assembly*** | | | | | | | | | | | | | | | |
| Contact Adhesive | 6.59 | 53.00% | 0.0% | 53.0% | 0.0% | 47.00% | 1.5000 | 0.500 | 3.49 | 3.49 | 2.62 | 62.87 | 11.47 | 5.09 | 7.43 | 50% |
| RTV Sealant | 8.76 | 5.00% | 0.0% | 5.0% | 0.0% | 95.00% | 0.3130 | 0.500 | 0.44 | 0.44 | 0.07 | 1.65 | 0.30 | 0.00 | 0.46 | 100% |
| ***Subtotal:*** | | | | | | | | | | | ***2.69*** | ***64.51*** | ***11.77*** | ***5.09*** | | |
| | | | | | | | | | | | | | | | | |
| ***Bus/ParaTransit Van Line No. 1,*** | ***Refinishing*** | | | | | | | | | | | | | | | |
| DP48LF Sealer | 11.90 | 36.15% | 0.0% | 36.15% | 0.0% | 38.81% | 0.1670 | 0.500 | 4.30 | 4.30 | 0.36 | 8.62 | 1.57 | 1.39 | 11.08 | 50% |
| DP402 Catalyst | 7.75 | 67.10% | 0.0% | 67.10% | 0.0% | 27.51% | 0.0830 | 0.500 | 5.20 | 5.20 | 0.22 | 5.18 | 0.95 | 0.23 | 18.90 | 50% |
| NCT Catalyst | 7.69 | 44.01% | 0.0% | 44.01% | 0.0% | 24.24% | 0.0230 | 0.500 | 3.38 | 3.38 | 0.04 | 0.93 | 0.17 | 0.11 | 13.96 | 50% |
| NCT Primer | 10.93 | 41.36% | 0.0% | 41.36% | 0.0% | 36.00% | 0.1250 | 0.500 | 4.52 | 4.52 | 0.28 | 6.78 | 1.24 | 0.88 | 12.56 | 50% |
| DTL Thinner | 6.69 | 80.40% | 0.0% | 80.40% | 0.0% | 0.00% | 0.2500 | 0.500 | 5.38 | 5.38 | 0.67 | 16.14 | 2.94 | 0.36 | ERR | 50% |
| DBU Base | 8.18 | 59.16% | 0.0% | 59.16% | 0.0% | 0.00% | 0.3130 | 0.500 | 4.84 | 4.84 | 0.76 | 18.18 | 3.32 | 1.14 | ERR | 50% |
| DRR1170 Reducer | 7.13 | 76.04% | 0.0% | 76.04% | 0.0% | 0.00% | 0.3750 | 0.500 | 5.42 | 5.42 | 1.02 | 24.40 | 4.45 | 0.70 | ERR | 50% |
| DX394 Cleaner | 8.07 | 99.74% | 83.2% | 16.57% | 80.6% | 0.21% | 0.1250 | 0.500 | 6.90 | 1.34 | 0.08 | 2.01 | 0.37 | 0.00 | 636.76 | 50% |
| DAU82 Clear | 7.99 | 51.19% | 0.0% | 51.19% | 0.0% | 41.85% | 0.2500 | 0.500 | 4.09 | 4.09 | 0.51 | 12.27 | 2.24 | 1.07 | 9.77 | 50% |
| DAU Catalyst | 7.83 | 77.14% | 0.0% | 77.14% | 0.0% | 19.42% | 0.2500 | 0.500 | 6.04 | 6.04 | 0.76 | 18.12 | 3.31 | 0.49 | 31.10 | 50% |
| DT870 Reducer | 6.91 | 100.00% | 0.0% | 100.00% | 0.0% | 0.00% | 0.1250 | 0.500 | 6.91 | 6.91 | 0.43 | 10.37 | 1.89 | 0.00 | ERR | 50% |
| ***Subtotal:*** | | | | | | | | | | | ***5.12*** | ***122.99*** | ***22.45*** | ***6.37*** | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| ***Bus/ParaTransit Van Line No. 1,*** | ***Undercoating*** | | | | | | | | | | | | | | | |
| Black Rust Protection | 7.43 | 40.00% | 0.0% | 40.0% | 0.0% | 53.00% | 2.0000 | 0.625 | 2.97 | 2.97 | 3.72 | 89.16 | 16.27 | 6.10 | 5.61 | 75% |
| AA Water Base Rust Prot | 8.17 | 55.00% | 45.0% | 10.0% | 45.0% | 45.00% | 0.2500 | 0.625 | 1.49 | 0.82 | 0.13 | 3.06 | 0.56 | 0.25 | 1.82 | 90% |
| ***Subtotal:*** | | | | | | | | | | | ***3.84*** | ***92.22*** | ***16.83*** | ***6.35*** | | |
| | | | | | | | | | | | | | | | | |
| ***Bus/ParaTransit Van Line No. 2,*** | ***Assembly*** | | | | | | | | | | | | | | | |
| Contact Adhesive | 6.59 | 53.00% | 0.0% | 53.0% | 0.0% | 47.00% | 1.5000 | 0.500 | 3.49 | 3.49 | 2.62 | 62.87 | 11.47 | 5.09 | 7.43 | 50% |
| RTV Sealant | 8.76 | 5.00% | 0.0% | 5.0% | 0.0% | 95.00% | 0.3130 | 0.500 | 0.44 | 0.44 | 0.07 | 1.65 | 0.30 | 0.00 | 0.46 | 100% |
| ***Subtotal:*** | | | | | | | | | | | ***2.69*** | ***64.51*** | ***11.77*** | ***5.09*** | | |
| | | | | | | | | | | | | | | | | |
| ***Bus/ParaTransit Van Line No. 2,*** | ***Refinishing*** | | | | | | | | | | | | | | | |
| DP48LF Sealer | 11.90 | 36.15% | 0.0% | 36.15% | 0.0% | 38.81% | 0.1670 | 0.500 | 4.30 | 4.30 | 0.36 | 8.62 | 1.57 | 1.39 | 11.08 | 50% |
| DP402 Catalyst | 7.75 | 67.10% | 0.0% | 67.10% | 0.0% | 27.51% | 0.0830 | 0.500 | 5.20 | 5.20 | 0.22 | 5.18 | 0.95 | 0.23 | 18.90 | 50% |
| NCT Catalyst | 7.69 | 44.01% | 0.0% | 44.01% | 0.0% | 24.24% | 0.0230 | 0.500 | 3.38 | 3.38 | 0.04 | 0.93 | 0.17 | 0.11 | 13.96 | 50% |
| NCT Primer | 10.93 | 41.36% | 0.0% | 41.36% | 0.0% | 36.00% | 0.1250 | 0.500 | 4.52 | 4.52 | 0.28 | 6.78 | 1.24 | 0.88 | 12.56 | 50% |
| DTL Thinner | 6.69 | 80.40% | 0.0% | 80.40% | 0.0% | 0.00% | 0.2500 | 0.500 | 5.38 | 5.38 | 0.67 | 16.14 | 2.94 | 0.36 | ERR | 50% |
| DBU Base | 8.18 | 59.16% | 0.0% | 59.16% | 0.0% | 0.00% | 0.3130 | 0.500 | 4.84 | 4.84 | 0.76 | 18.18 | 3.32 | 1.14 | ERR | 50% |
| DRR1170 Reducer | 7.13 | 76.04% | 0.0% | 76.04% | 0.0% | 0.00% | 0.3750 | 0.500 | 5.42 | 5.42 | 1.02 | 24.40 | 4.45 | 0.70 | ERR | 50% |
| DX394 Cleaner | 8.07 | 99.74% | 83.2% | 16.57% | 80.6% | 0.21% | 0.1250 | 0.500 | 6.90 | 1.34 | 0.08 | 2.01 | 0.37 | 0.00 | 636.76 | 50% |
| DAU82 Clear | 7.99 | 51.19% | 0.0% | 51.19% | 0.0% | 41.85% | 0.2500 | 0.500 | 4.09 | 4.09 | 0.51 | 12.27 | 2.24 | 1.07 | 9.77 | 50% |
| DAU Catalyst | 7.83 | 77.14% | 0.0% | 77.14% | 0.0% | 19.42% | 0.2500 | 0.500 | 6.04 | 6.04 | 0.76 | 18.12 | 3.31 | 0.49 | 31.10 | 50% |
| DT870 Reducer | 6.91 | 100.00% | 0.0% | 100.00% | 0.0% | 0.00% | 0.1250 | 0.500 | 6.91 | 6.91 | 0.43 | 10.37 | 1.89 | 0.00 | ERR | 50% |
| ***Subtotal:*** | | | | | | | | | | | ***5.12*** | ***122.99*** | ***22.45*** | ***6.37*** | | |
| | | | | | | | | | | | | | | | | |
| ***Bus/ParaTransit Van Line No. 2,*** | ***Undercoating*** | | | | | | | | | | | | | | | |
| Black Rust Protection | 7.43 | 40.00% | 0.0% | 40.0% | 0.0% | 53.00% | 2.0000 | 0.625 | 2.97 | 2.97 | 3.72 | 89.16 | 16.27 | 6.10 | 5.61 | 75% |
| AA Water Base Rust Prot | 8.17 | 55.00% | 45.0% | 10.0% | 45.0% | 45.00% | 0.2500 | 0.625 | 1.49 | 0.82 | 0.13 | 3.06 | 0.56 | 0.25 | 1.82 | 90% |
| ***Subtotal:*** | | | | | | | | | | | ***3.84*** | ***92.22*** | ***16.83*** | ***6.35*** | | |
| | | | | | | | | | | | | | | | | |

**Appendix A: Emissions Calculations**
**VOC and Particulate**
**From Surface Coating Operations at Plant 4**

**Company Name:** The Braun Corporation
**Address City IN Zip:** 623 West 11th Street, Winamac, IN 46996
**Source Modification:** 131-11788
**Plt ID:** 131-00017
**Reviewer:** MES/Patrick T. Brennan
**Date:** January 21, 2000

| Material<br>**PLANT #4 (cont'd)** | Density (lb/gal) | Weight % Volatile (H20 & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Vol (solids) | Gal of Mat (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential tons per year | lb VOC /gal solids | Transfer Efficiency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Flare Painting Facility*** | | | | | | | | | | | | | | | | |
| DBU Base | 8.18 | 59.16% | 0.0% | 59.16% | 0.0% | 31.51% | 0.1250 | 2.250 | 4.84 | 4.84 | 1.36 | 32.67 | 5.96 | 2.06 | 15.36 | 50% |
| DRR Reducer | 7.13 | 76.04% | 0.0% | 76.0% | 45.0% | 25.00% | 0.1250 | 2.250 | 9.86 | 5.42 | 1.52 | 36.60 | 6.68 | 0.21 | 21.69 | 90% |
| ***Subtotal:*** | | | | | | | | | | | ***2.89*** | ***69.26*** | ***12.64*** | ***2.27*** | | |
| | | | | | | | | | | | | | | | | |
| ***Touch-Up Booth No. 1*** | | | | | | | | | | | | | | | | |
| DBU Base | 8.18 | 59.16% | 0.0% | 59.16% | 0.0% | 40.00% | 0.0160 | 1.250 | 4.84 | 4.84 | 0.10 | 2.32 | 0.42 | 0.15 | 12.10 | 50% |
| DBU Reducer | 7.13 | 76.04% | 0.0% | 76.04% | 0.0% | 25.00% | 0.0160 | 1.250 | 5.42 | 5.42 | 0.11 | 2.60 | 0.47 | 0.07 | 21.69 | 50% |
| DAU Acrylic Urethane Clear | 7.99 | 51.19% | 0.0% | 51.19% | 0.0% | 50.00% | 0.0160 | 1.250 | 4.09 | 4.09 | 0.08 | 1.96 | 0.36 | 0.17 | 8.18 | 50% |
| DAU2 Catalyst | 7.83 | 76.84% | 0.0% | 76.84% | 0.0% | 24.00% | 0.0160 | 1.250 | 6.02 | 6.02 | 0.12 | 2.89 | 0.53 | 0.08 | 25.07 | 50% |
| DT870 Reducer | 6.91 | 100.00% | 0.0% | 100.00% | 0.0% | 0.00% | 0.0160 | 1.250 | 6.91 | 6.91 | 0.14 | 3.32 | 0.61 | 0.00 | ERR | 50% |
| ***Subtotal:*** | | | | | | | | | | | ***0.55*** | ***13.09*** | ***2.39*** | ***0.47*** | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| ***Touch-Up Booth No. 2*** | | | | | | | | | | | | | | | | |
| DBU Base | 8.18 | 59.16% | 0.0% | 59.16% | 0.0% | 40.00% | 0.0160 | 1.250 | 4.84 | 4.84 | 0.10 | 2.32 | 0.42 | 0.15 | 12.10 | 50% |
| DBU Reducer | 7.13 | 76.04% | 0.0% | 76.04% | 0.0% | 25.00% | 0.0160 | 1.250 | 5.42 | 5.42 | 0.11 | 2.60 | 0.47 | 0.07 | 21.69 | 50% |
| DAU Acrylic Urethane Clear | 7.99 | 51.19% | 0.0% | 51.19% | 0.0% | 50.00% | 0.0160 | 1.250 | 4.09 | 4.09 | 0.08 | 1.96 | 0.36 | 0.17 | 8.18 | 50% |
| DAU2 Catalyst | 7.83 | 76.84% | 0.0% | 76.84% | 0.0% | 24.00% | 0.0160 | 1.250 | 6.02 | 6.02 | 0.12 | 2.89 | 0.53 | 0.08 | 25.07 | 50% |
| DT870 Reducer | 6.91 | 100.00% | 0.0% | 100.00% | 0.0% | 0.00% | 0.0160 | 1.250 | 6.91 | 6.91 | 0.14 | 3.32 | 0.61 | 0.00 | ERR | 50% |
| ***Subtotal:*** | | | | | | | | | | | ***0.55*** | ***13.09*** | ***2.39*** | ***0.47*** | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | **GRAND TOTAL:** | **46.18** | **1108.34** | **202.27** | **77.88** | | |

| Control Technology Emissions (Combustion) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Emission Factors | | | | | | Emissions | | | |
| Type | Number | Capacity | Gas usage | PM | PM10 | SO2 | NOx | VOC | CO | PM | PM10 | SO2 | NOx | VOC | CO |
| | | MMBtu/hr | MMCF/yr | lb/MMCF | lb/MMCF | lb/MMCF | lb/MMCF | lb/MMCF | lb/MMCF | tons/yr | tons/yr | tons/yr | tons/yr | tons/yr | tons/yr |
| Catalytic | | | 0.0 | 3.0 | 3.0 | 0.6 | 100.0 | 5.3 | 35.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | | | | | | | | | | |
| Thermal | | | 0.0 | 3.0 | 3.0 | 0.6 | 140.0 | 2.8 | 20.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | | | | | | | | | | |
| Total | | | 0.0 | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | Control Efficiency | | Controlled | Controlled | Controlled | Controlled | |
| | | | | | | | | | VOC | PM | VOC pounds | VOC pounds | VOC | Particulate | |
| | | | | | | | | | | **0** | per hour | per day | tons/yr | tons/yr | |

Controlled Emissions due to Surface Coating Operations and Controls

**Controlled Total:** **46.18** **1108.34** **202.27** **77.88**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

**Appendix A: HAP Emissions Calculations**

**From Surface Coating Operations at Plant 4**

**Company Name:** The Braun Corporation
**Address City IN Zip:** 623 West 11th Street, Winamac, IN 46996
**Source Modification:** 131-11788
**Plt ID:** 131-00017
**Reviewer:** MES/Patrick T. Brennan
**Date:** January 21, 2000

| Material<br>PLANT #4 | Density (lb/gal) | Gal of Mat (gal/unit) | Maximum (unit/hour) | Weight % Toluene | Weight % Hexane | Weight % Xylene | Weight % MEK | Weight % MIBK | Weight % Glycol Ethers | Weight % Ethyl Benzene | Toluene Emissions (tons/year) | Hexane Emissions (tons/year) | Xylene Emissions (tons/year) | MEK Emissions (tons/year) | MIBK Emissions (tons/year) | Glycol Ethers Emissions (tons/year) | Ethyl Benzene Emissions (tons/year) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***EnterVan Line No. 1, Assembly*** | | | | | | | | | | | | | | | | | |
| Contact Adhesive | 6.59 | 2.0000 | 0.625 | 8.0% | 10.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.89 | 3.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RTV Sealant | 8.76 | 0.3130 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***2.89*** | ***3.61*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** |
| | | | | | | | | | | | | | | | | | |
| ***EnterVan Line No. 1, Refinishing*** | | | | | | | | | | | | | | | | | |
| DP48LF Primer | 11.90 | 0.2810 | 0.625 | 4.1% | 0.0% | 3.7% | 0.0% | 5.3% | 4.4% | 0.5% | 0.38 | 0.00 | 0.34 | 0.00 | 0.49 | 0.40 | 0.05 |
| DP402 Catalyst | 7.75 | 0.1410 | 0.625 | 2.3% | 0.0% | 0.0% | 13.4% | 0.0% | 0.0% | 0.0% | 0.07 | 0.00 | 0.00 | 0.40 | 0.00 | 0.00 | 0.00 |
| DBU Base | 8.18 | 0.1410 | 0.625 | 7.1% | 0.0% | 3.1% | 2.7% | 0.0% | 0.0% | 0.6% | 0.22 | 0.00 | 0.10 | 0.09 | 0.00 | 0.00 | 0.02 |
| DCU 2082 Clear | 7.90 | 0.0780 | 0.625 | 6.3% | 0.0% | 20.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.11 | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 | 0.00 |
| DCH 2083 Fast | 7.83 | 0.0230 | 0.625 | 10.0% | 0.0% | 0.0% | 30.0% | 20.0% | 0.0% | 0.0% | 0.05 | 0.00 | 0.00 | 0.15 | 0.10 | 0.00 | 0.00 |
| DCH 2084 Medium | 7.13 | 0.0230 | 0.625 | 10.0% | 0.0% | 0.0% | 10.0% | 0.0% | 0.0% | 0.0% | 0.04 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| DCH 2085 Slow | 7.90 | 0.0230 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DCH 2086 Very Slow | 7.93 | 0.0230 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DTL-1 Thinner | 6.69 | 0.1560 | 0.625 | 45.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DX103 Prep Solvent | 6.57 | 0.0390 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ABS 30G | 6.67 | 0.0780 | 0.625 | 0.0% | 0.0% | 25.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***2.16*** | ***0.00*** | ***1.13*** | ***0.68*** | ***0.58*** | ***0.40*** | ***0.06*** |
| | | | | | | | | | | | | | | | | | |
| ***EnterVan Line No. 1, Undercoating*** | | | | | | | | | | | | | | | | | |
| Black Rust Protection | 7.43 | 1.0000 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AA Water Base Rust Prot | 8.17 | 0.0630 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| ***EnterVan Line No. 2, Assembly*** | | | | | | | | | | | | | | | | | |
| Contact Adhesive | 6.59 | 2.0000 | 0.625 | 8.0% | 10.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.89 | 3.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RTV Sealant | 8.76 | 0.3130 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***2.89*** | ***3.61*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** |
| | | | | | | | | | | | | | | | | | |
| ***EnterVan Line No. 2, Refinishing*** | | | | | | | | | | | | | | | | | |
| DP48LF Primer | 11.90 | 0.2810 | 0.625 | 4.1% | 0.0% | 3.7% | 0.0% | 5.3% | 4.4% | 0.5% | 0.38 | 0.00 | 0.34 | 0.00 | 0.49 | 0.40 | 0.05 |
| DP402 Catalyst | 7.75 | 0.1410 | 0.625 | 2.3% | 0.0% | 0.0% | 13.4% | 0.0% | 0.0% | 0.0% | 0.07 | 0.00 | 0.00 | 0.40 | 0.00 | 0.00 | 0.00 |
| DBU Base | 8.18 | 0.1410 | 0.625 | 7.1% | 0.0% | 3.1% | 2.7% | 0.0% | 0.0% | 0.6% | 0.22 | 0.00 | 0.10 | 0.09 | 0.00 | 0.00 | 0.02 |
| DCU 2082 Clear | 7.90 | 0.0780 | 0.625 | 6.3% | 0.0% | 20.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.11 | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 | 0.00 |
| DCH 2083 Fast | 7.83 | 0.0230 | 0.625 | 10.0% | 0.0% | 0.0% | 30.0% | 20.0% | 0.0% | 0.0% | 0.05 | 0.00 | 0.00 | 0.15 | 0.10 | 0.00 | 0.00 |
| DCH 2084 Medium | 7.13 | 0.0230 | 0.625 | 10.0% | 0.0% | 0.0% | 10.0% | 0.0% | 0.0% | 0.0% | 0.04 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| DCH 2085 Slow | 7.90 | 0.0230 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DCH 2086 Very Slow | 7.93 | 0.0230 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DTL-1 Thinner | 6.69 | 0.1560 | 0.625 | 45.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DX103 Prep Solvent | 6.57 | 0.0390 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ABS 30G | 6.67 | 0.0780 | 0.625 | 0.0% | 0.0% | 25.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***2.16*** | ***0.00*** | ***1.13*** | ***0.68*** | ***0.58*** | ***0.40*** | ***0.06*** |
| | | | | | | | | | | | | | | | | | |
| ***EnterVan Line No. 2, Undercoating*** | | | | | | | | | | | | | | | | | |
| Black Rust Protection | 7.43 | 1.0000 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AA Water Base Rust Prot | 8.17 | 0.0630 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** |

**Appendix A: HAP Emissions Calculations**

**From Surface Coating Operations at Plant 4**

**Company Name:** The Braun Corporation
**Address City IN Zip:** 623 West 11th Street, Winamac, IN 46996
**Source Modification:** 131-11788
**Plt ID:** 131-00017
**Reviewer:** MES/Patrick T. Brennan
**Date:** January 21, 2000

| Material<br>PLANT #4 (cont'd) | Density (lb/gal) | Gal of Mat (gal/unit) | Maximum (unit/hour) | Weight % Toluene | Weight % Hexane | Weight % Xylene | Weight % MEK | Weight % MIBK | Weight % Glycol Ethers | Weight % Ethyl Benzene | Toluene Emissions (tons/year) | Hexane Emissions (tons/year) | Xylene Emissions (tons/year) | MEK Emissions (tons/year) | MIBK Emissions (tons/year) | Glycol Ethers Emissions (tons/year) | Ethyl Benzene Emissions (tons/year) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Bus/ParaTransit Van Line No. 1,*** | ***Assembly*** | | | | | | | | | | | | | | | | |
| Contact Adhesive | 6.59 | 1.5000 | 0.500 | 8.0% | 10.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.73 | 2.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RTV Sealant | 8.76 | 0.3130 | 0.500 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***1.73*** | ***2.16*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** |
| | | | | | | | | | | | | | | | | | |
| ***Bus/ParaTransit Van Line No. 1,*** | ***Refinishing*** | | | | | | | | | | | | | | | | |
| DP48LF Sealer | 11.90 | 0.1670 | 0.500 | 4.1% | 0.0% | 3.7% | 0.0% | 5.3% | 4.4% | 0.5% | 0.18 | 0.00 | 0.16 | 0.00 | 0.23 | 0.19 | 0.02 |
| DP402 Catalyst | 7.75 | 0.0830 | 0.500 | 2.3% | 0.0% | 0.0% | 13.4% | 0.0% | 0.0% | 0.0% | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NCT Catalyst | 7.69 | 0.0230 | 0.500 | 24.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NCT Primer | 10.93 | 0.1250 | 0.500 | 6.4% | 0.0% | 7.0% | 0.0% | 0.0% | 0.0% | 1.4% | 0.19 | 0.00 | 0.21 | 0.00 | 0.00 | 0.00 | 0.04 |
| DTL Thinner | 6.69 | 0.2500 | 0.500 | 45.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DBU Base | 8.18 | 0.3130 | 0.500 | 7.1% | 0.0% | 3.1% | 2.7% | 0.0% | 0.0% | 0.6% | 0.40 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 | 0.03 |
| DRR1170 Reducer | 7.13 | 0.3750 | 0.500 | 11.1% | 0.0% | 5.3% | 0.0% | 0.0% | 0.0% | 1.2% | 0.65 | 0.00 | 0.31 | 0.00 | 0.00 | 0.00 | 0.07 |
| DX394 Cleaner | 8.07 | 0.1250 | 0.500 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 8.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 |
| DAU82 Clear | 7.99 | 0.2500 | 0.500 | 6.3% | 0.0% | 1.2% | 7.2% | 0.0% | 0.0% | 0.0% | 0.28 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 |
| DAU Catalyst | 7.83 | 0.2500 | 0.500 | 12.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DT870 Reducer | 6.91 | 0.1250 | 0.500 | 19.0% | 0.0% | 0.0% | 32.5% | 0.0% | 0.0% | 0.0% | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***4.39*** | ***0.00*** | ***0.91*** | ***0.00*** | ***0.23*** | ***0.37*** | ***0.17*** |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| ***Bus/ParaTransit Van Line No. 1,*** | ***Undercoating*** | | | | | | | | | | | | | | | | |
| Black Rust Protection | 7.43 | 2.0000 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AA Water Base Rust Prot | 8.17 | 0.2500 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** |
| | | | | | | | | | | | | | | | | | |
| ***Bus/ParaTransit Van Line No. 2,*** | ***Assembly*** | | | | | | | | | | | | | | | | |
| Contact Adhesive | 6.59 | 1.5000 | 0.500 | 8.0% | 10.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.73 | 2.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| RTV Sealant | 8.76 | 0.3130 | 0.500 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***1.73*** | ***2.16*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** |
| | | | | | | | | | | | | | | | | | |
| ***Bus/ParaTransit Van Line No. 2,*** | ***Refinishing*** | | | | | | | | | | | | | | | | |
| DP48LF Sealer | 11.90 | 0.1670 | 0.500 | 4.1% | 0.0% | 3.7% | 0.0% | 5.3% | 4.4% | 0.5% | 0.18 | 0.00 | 0.16 | 0.00 | 0.23 | 0.19 | 0.02 |
| DP402 Catalyst | 7.75 | 0.0830 | 0.500 | 2.3% | 0.0% | 0.0% | 13.4% | 0.0% | 0.0% | 0.0% | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NCT Catalyst | 7.69 | 0.0230 | 0.500 | 24.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NCT Primer | 10.93 | 0.1250 | 0.500 | 6.4% | 0.0% | 7.0% | 0.0% | 0.0% | 0.0% | 1.4% | 0.19 | 0.00 | 0.21 | 0.00 | 0.00 | 0.00 | 0.04 |
| DTL Thinner | 6.69 | 0.2500 | 0.500 | 45.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DBU Base | 8.18 | 0.3130 | 0.500 | 7.1% | 0.0% | 3.1% | 2.7% | 0.0% | 0.0% | 0.6% | 0.40 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 | 0.03 |
| DRR1170 Reducer | 7.13 | 0.3750 | 0.500 | 11.1% | 0.0% | 5.3% | 0.0% | 0.0% | 0.0% | 1.2% | 0.65 | 0.00 | 0.31 | 0.00 | 0.00 | 0.00 | 0.07 |
| DX394 Cleaner | 8.07 | 0.1250 | 0.500 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 8.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 |
| DAU82 Clear | 7.99 | 0.2500 | 0.500 | 6.3% | 0.0% | 1.2% | 7.2% | 0.0% | 0.0% | 0.0% | 0.28 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 |
| DAU Catalyst | 7.83 | 0.2500 | 0.500 | 12.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DT870 Reducer | 6.91 | 0.1250 | 0.500 | 19.0% | 0.0% | 0.0% | 32.5% | 0.0% | 0.0% | 0.0% | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***4.39*** | ***0.00*** | ***0.91*** | ***0.00*** | ***0.23*** | ***0.37*** | ***0.17*** |
| | | | | | | | | | | | | | | | | | |
| ***Bus/ParaTransit Van Line No. 2,*** | ***Undercoating*** | | | | | | | | | | | | | | | | |
| Black Rust Protection | 7.43 | 2.0000 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AA Water Base Rust Prot | 8.17 | 0.2500 | 0.625 | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** | ***0.00*** |
| | | | | | | | | | | | | | | | | | |

**Appendix A: HAP Emissions Calculations**

**From Surface Coating Operations at Plant 4**

**Company Name:** The Braun Corporation
**Address City IN Zip:** 623 West 11th Street, Winamac, IN 46996
**Source Modification:** 131-11788
**Plt ID:** 131-00017
**Reviewer:** MES/Patrick T. Brennan
**Date:** January 21, 2000

| Material<br>**PLANT #4 (cont'd)** | Density (lb/gal) | Gal of Mat (gal/unit) | Maximum (unit/hour) | Weight % Toluene | Weight % Hexane | Weight % Xylene | Weight % MEK | Weight % MIBK | Weight % Glycol Ethers | Weight % Ethyl Benzene | Toluene Emissions (tons/year) | Hexane Emissions (tons/year) | Xylene Emissions (tons/year) | MEK Emissions (tons/year) | MIBK Emissions (tons/year) | Glycol Ethers Emissions (tons/year) | Ethyl Benzene Emissions (tons/year) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***Flare Painting Facility*** | | | | | | | | | | | | | | | | | |
| DBU Base | 8.18 | 0.1250 | 2.250 | 11.1% | 0.0% | 5.3% | 0.0% | 0.0% | 0.0% | 1.2% | 1.12 | 0.00 | 0.53 | 0.00 | 0.00 | 0.00 | 0.12 |
| DRR Reducer | 7.13 | 0.1250 | 2.250 | 7.1% | 0.0% | 3.1% | 2.7% | 0.0% | 0.0% | 0.6% | 0.62 | 0.00 | 0.27 | 0.24 | 0.00 | 0.00 | 0.05 |
| ***Subtotal:*** | | | | | | | | | | | ***1.74*** | ***0.00*** | ***0.81*** | ***0.24*** | ***0.00*** | ***0.00*** | ***0.17*** |
| | | | | | | | | | | | | | | | | | |
| ***Touch-Up Booth No. 1*** | | | | | | | | | | | | | | | | | |
| DBU Base | 8.18 | 0.0160 | 1.250 | 7.1% | 0.0% | 3.1% | 2.7% | 0.0% | 0.0% | 0.6% | 0.05 | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 |
| DBU Reducer | 7.13 | 0.0160 | 1.250 | 11.1% | 0.0% | 5.3% | 0.0% | 0.0% | 0.0% | 1.2% | 0.07 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.01 |
| DAU Acrylic Urethane Clear | 7.99 | 0.0160 | 1.250 | 6.3% | 0.0% | 1.2% | 7.2% | 0.0% | 0.0% | 0.0% | 0.04 | 0.00 | 0.01 | 0.05 | 0.00 | 0.00 | 0.00 |
| DAU2 Catalyst | 7.83 | 0.0160 | 1.250 | 12.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DT870 Reducer | 6.91 | 0.0160 | 1.250 | 19.0% | 0.0% | 0.0% | 32.5% | 0.0% | 0.0% | 0.0% | 0.12 | 0.00 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***0.37*** | ***0.00*** | ***0.06*** | ***0.27*** | ***0.00*** | ***0.00*** | ***0.01*** |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| ***Touch-Up Booth No. 2*** | | | | | | | | | | | | | | | | | |
| DBU Base | 8.18 | 0.0160 | 1.250 | 7.1% | 0.0% | 3.1% | 2.7% | 0.0% | 0.0% | 0.6% | 0.05 | 0.00 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 |
| DBU Reducer | 7.13 | 0.0160 | 1.250 | 11.1% | 0.0% | 5.3% | 0.0% | 0.0% | 0.0% | 1.2% | 0.07 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.01 |
| DAU Acrylic Urethane Clear | 7.99 | 0.0160 | 1.250 | 6.3% | 0.0% | 1.2% | 7.2% | 0.0% | 0.0% | 0.0% | 0.04 | 0.00 | 0.01 | 0.05 | 0.00 | 0.00 | 0.00 |
| DAU2 Catalyst | 7.83 | 0.0160 | 1.250 | 12.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| DT870 Reducer | 6.91 | 0.0160 | 1.250 | 19.0% | 0.0% | 0.0% | 32.5% | 0.0% | 0.0% | 0.0% | 0.12 | 0.00 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 |
| ***Subtotal:*** | | | | | | | | | | | ***0.37*** | ***0.00*** | ***0.06*** | ***0.27*** | ***0.00*** | ***0.00*** | ***0.01*** |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | **GRAND TOTAL:** | **24.82** | **11.55** | **5.01** | **2.13** | **1.63** | **1.54** | **0.66** |

**Total HAPs = 47.33 Tons Per Year**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs